



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462

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Doug Domenech  
Secretary of Natural Resources

David K. Paylor  
Director

Francis L. Daniel  
Regional Director

July 1, 2010

Mr. Wayne Black  
Director - Agribusiness Environmental  
Perdue AgriBusiness, Incorporated  
501A Barnes Road  
Chesapeake, Virginia 23324

Location: Chesapeake  
**Registration No. 60277**  
AFS. Id. No.: 51-550-00038

Dear Mr. Black:

Attached is a permit to operate your soybean processing facility and grain elevator pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit replaces your previous Title V Federal Operating Permit dated September 7, 2004. The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue the permit, the Department deemed the application complete on May 10, 2010, and solicited written public comments by placing a newspaper advertisement in The Virginian-Pilot on May 14, 2010. The thirty-day comment period (provided for in 9 VAC 5-80-270) ended on June 14, 2010, with no comments having been received in this office.

This approval to operate shall not relieve Perdue AgriBusiness, Incorporated of the responsibility to comply with all other local, state and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

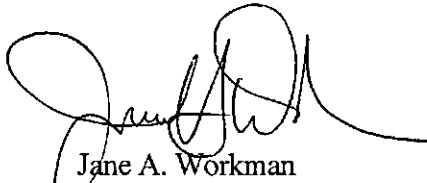
Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Director  
Department of Environmental Quality  
P. O. Box 10009  
Richmond, Virginia 23240-0009

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please call Ms. Laura D. Corl at (757) 518-2178.

Sincerely,



Jane A. Workman  
Air Permit Manager

Jaw/lde/60277\_013\_10\_T5Renew\_cvrltr.doc

Attachment: Operating Permit  
Statement of Basis

Cc: Director, OAPP (electronic file)  
Manager, Data Analysis (electronic file)  
Chief, Air Enforcement Branch (3AP12), U.S. EPA, Region III (electronic file)  
Compliance Manager/Inspector (hard copy)



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### Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Perdue AgriBusiness, Incorporated
Facility Name:	Perdue AgriBusiness, Incorporated 501A Barnes Road Chesapeake, Virginia 23324
Registration Number:	60277
Permit Number:	TRO-60277

This permit includes the following programs:

**Federally Enforceable Requirements - Clean Air Act (Sections I through XIII)**

**State Only Enforceable Requirements (Section XIV)**

July 1, 2010  
Effective Date

September 6, 2014  
Expiration Date

  
Deputy Regional Director

July 1, 2010  
Signature Date

Table of Contents, 2 pages.  
Permit Conditions, 46 pages

**TITLE V PERMIT**  
**Perdue AgriBusiness, Incorporated**

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## **I. Facility Information**

### **Permittee**

Perdue AgriBusiness, Incorporated  
501 Barnes Road  
Chesapeake, Virginia 23324

### **Responsible Official**

Wayne Black  
Director – Agribusiness Environmental

### **Facility**

Perdue AgriBusiness, Incorporated  
501 Barnes Road  
Chesapeake, Virginia 23324

### **Contact Person**

America Koll  
Environmental Manager  
757-494-5562

**County-Plant Identification Number:** 51-550-00038 and 51-550-00048

**Facility Description:** NAICS [311222] – Processing of raw soybeans into soybean oil and meal. There are four distinct procedures at the plant: soybean preparation, soybean oil extraction and soybean meal processing.

**Soybean Preparation** – Soybeans are unloaded from shipping containers into storage tanks. The soybeans are cleaned, cracked, dehulled and flaked to produce hulls and flakes of soybean meal. The hulls are ground, pelletized, stored and loaded into shipping containers. The flakes are transferred to the soybean oil extraction section. The soybean preparation operations generate particulate matter emissions from storage tanks, conveyance systems, process vents and loading operations. Most of these emission points are controlled by equipment such as cyclones or fabric filter dust collectors.

**Soybean oil extraction** – Soybean oil is extracted from the soybean flakes using hexane as a solvent. The extraction unit includes an extraction step, hexane recovery units, condensers, hexane-water separators and hexane accumulation tanks. The extraction step produces soybean oil/hexane mixture and hexane-laden flakes. Hexane is stripped from the soybean oil mixture and flakes in hexane recovery units and reused in the extraction step. Finished soybean oil is transferred to storage tanks and subsequently loaded into shipping containers. Spent soybean flakes are transferred to the soybean meal section for further processing. The extraction process is enclosed and interconnected, with one common process vent to the atmosphere. Fresh hexane is periodically added to the unit to replace cumulative hexane losses from hexane recovery units, fugitive sources and the process vent.

All hexane recovery occurs within the production units, consequently there is no separate hexane emissions control device. Hexane is a VOC and contains n-hexane which is a hazardous air pollutant (HAP). No other pollutants are expected to be emitted from this process.

**Soybean meal processing** – Spent flakes from the soybean oil extraction process are dried, cooled and ground into soybean meal. The finished meal is transferred to storage and subsequently loaded into shipping containers. The soybean meal processing operations generate particulate emissions from process vents, conveyance systems and loading operations. Most of the emission points are controlled by equipment such as cyclones or fabric filter dust collectors.

**Coal-fired boiler** - The soybean extraction process is supported by a coal-fired boiler with a firing capacity of 106 MMBtu/hr. Steam production from the boiler is used in the soybean extraction section and for plant utility purposes. Coal for the boiler is unloaded into a storage silo. Boiler fly ash is transferred into an ash silo and loaded into trucks for transport off-site. Particulate emissions from the boiler and fly ash handling system are controlled by fabric filter dust collectors. In addition to particulate matter, the boiler emits SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC and other trace HAP due to coal combustion byproducts.

#### **Applicable Requirements for Title V Renewal**

Perdue Grain and Oilseed LLC has operated the facility over the past five years, during which the PSD permit for the boiler and the other NSR permits have not been amended. A NESHAP for vegetable oil production (Subpart GGGG) was promulgated several years ago and has added several applicable requirements to the Title V permit. During 2003, the dryer/cooler equipment was replaced with a newer configuration unit and a new NSR permit was generated for the facility. Also, the facility has proposed a plan to comply with the CAM Rule for any emission units that are determined to be subject to the rule. The application for this facility includes a table of calculations of the uncontrolled emissions of particulate and PM<sub>10</sub> for the process equipment. Several emission units have major source levels of particulate emissions and are fitted with control equipment. While it is true that the dust generated by soybean processing may be routed back to another processing point, the emission units selected for CAM have substantial emission levels. The CAM Plan for this facility formalizes some procedures that are already in place to correct abnormal levels of visible and/or particulate emissions. The recordkeeping and reporting required by the Rule can be combined with the semi-annual reports that are necessary for all Title V facilities. The CAM provisions have been included in the Facility Wide conditions of this permit at Section X.

The majority of the plant's emission points are controlled by equipment such as cyclones or dust collectors. A flow diagram of the overall process, a list of insignificant emission units, the significant units and the applicable pollution control equipment can be found in the application.

## II. Emission Units

Oilseed Plant Equipment to be operated consists of:

Emission Unit ID	Vent and Stack ID	Emission Unit Description	Size/Rated Capacity*	Applicable Permit Date
<b>Chesapeake Oilseed Plant</b>				
31	S-33	Tank Q; Dried bean storage	125 tons per hour	N/A
32	S-34	Tank R; Dried bean storage	125 tons per hour	N/A
33	S-35	Tank S; Dried bean storage	125 tons per hour	N/A
34	S-36	Tank T; Dried bean storage	125 tons per hour	N/A
35	S-37	Tank U; Dried bean storage	125 tons per hour	N/A
44	S-1	Tank V; Dried bean storage	125 tons per hour	N/A
43	S-2	Tank W; Dried bean storage	125 tons per hour	N/A
42	S-3	Tank X; Dried bean storage	125 tons per hour	N/A
41	S-4	Tank Y; Dried bean storage	125 tons per hour	N/A
40	S-5	Tank Z; Dried bean storage	125 tons per hour	N/A
45	S-6	Whole bean receiving surge tank	125 tons per hour	N/A
102	S-6	Whole bean cleaning to include aspirator	123 tons per hour	N/A
107A-E	S-9	De-hulling-5 primary soybean rolling/cracking rollers with 5 aspirators	120 tons per hour	N/A
111 A-D	S-10	Dehulling-2 secondary hulls cracking impactors (east & west) with 4 aspirators	119 tons per hour	N/A
130	S-6	Hull cleaning - coarse hull aspirator	5.0 tons per hour	N/A
132	S-6	Hull cleaning - mids hull aspirator	2.0 tons per hour	October 5, 2009
136	S-11	Hull grinding main storage tank	21.3 tons per hour	October 5, 2009
113A-F/520	S-8	Flakers/discharge drag (A to F); soybean flaking	61 tons per hour	N/A
113H-N/521	S-8	Flakers/discharge drag (H to N); soybean flaking	61 tons per hour	N/A
EA-1	S-33	Extraction processes and solvent recovery; from soybean oil extraction process	70 tons/hour / 125tph SB	N/A
165/166	S-8A	Flake expanders east and west	122 tons per hour	N/A
156	S-13 / S-14	DeSmet dryer/cooler; soybean meat drying and cooling	96 tons per hour	July 9, 2003
50	S-15	Clay tank; additive tank	25 tons per hour	N/A
163/532	S-16	Sifters/grinder feed drag; soybean meal sifting and grinding	121 tons per hour	N/A
164/533	S-16	Meal grinders/discharge drag; soybean meal sifting and grinding	125 tons per hour	N/A



44	S-17	North meal tank; meal storage	125 tons per hour	N/A
48	S-18	South pellet/meal tank; pellet/meal storage	125 tons per hour	N/A
75	S-19	Meal shed; meal loadout	125 tons per hour	N/A
1001	S-16	Meal scale; meal loadout	125 tons per hour	N/A
443	S-20	Pellet, hull and meal railcar loadout	125 tons per hour	N/A
444	S-21	Pellet and meal truck loadout	125 tons per hour	N/A
754	S-22	Pellet production tank	21 tons per hour	N/A
754	S-27	Production tank blower; soybean hull pelletizing	15 tons per hour	October 5, 2009
175	S-28	Pellet cooler; soybean hull pelletizing	15 tons per hour	October 5, 2009
AS-1	S-31	Ash silo; ash handling	30 tons per hour	January 13, 2004
ATL-1	S-32	Ash truck loadout; ash handling	60 tons per hour	January 13, 2004
GD-1	S-22	Grain Dust Transfer Line to hull pellet production tank	21 tons per year	October 5, 2009
<b>Fuel Burning Equipment</b>				
CFB-1	S-30	Coal-fired boiler; steam generation	106.0 million Btu/hour	January 13, 2004
TB-1	TBS-1	Natural gas-fired temporary boiler	< = 96 mmBtu/hour	March 16, 2010

**Pollution Control Equipment Consists of:**

Unit Ref. Number	Stack Ref. No.	Control Equipment Description	Manufacturer and Model No.	% Efficiency	Pollutants Controlled
45	S-6	Whole bean dust collector	Pneumafil 11.5-316-8	99% efficient	PM/PM10
101	S-6	Whole bean dust collector	Pneumafil 11.5-316-8	99% efficient	PM/PM10
102	S-6	Whole bean dust collector	Pneumafil 11.5-316-8	99% efficient	PM/PM10
107A-E	S-9	Primary dehulling cyclone	Escher Wyss Cyclone Z1-200	95% efficient	PM/PM10
111	S-10	Secondary dehulling cyclone	Escher Wyss Cyclone Z1-200	95% efficient	PM/PM10
130	S-6	Whole bean dust collector	Pneumafil 11.5-316-8	99% efficient	PM/PM10
132	S-6	Whole bean dust collector	Pneumafil 11.5-316-8	99% efficient	PM/PM10
136/47	S-11	Ground hull dust collector	Rolfes Model 42-RLP-10	99% efficient	PM/PM10
113A-F/520	S-8	Flaker aspiration cyclone	Carter Day 56 HV	99% efficient	PM/PM10
113H-M/521	S-8	Flaker aspiration cyclone	Carter Day 56 HV	99% efficient	PM/PM10
156	S-13 and S-14	Dryer cooler cyclones (2)	Kice CKS 132	99% efficient	PM/PM10
50	S-15	Clay tank dust collector	Cargill Design	99% efficient	PM/PM10
163/532	S-16	Meal grinding dust collector	Alanco 188 RLP8	99% efficient	PM/PM10
164/533	S-16	Meal grinding dust collector	Alanco 188 RLP8	99% efficient	PM/PM10
1001	S-16	Meal grinding dust collector	Alanco 188 RLP8	99% efficient	PM/PM10
443	S-20	Loadout dust collector	Alanco 188RLP8	99% efficient	PM/PM10

444	S-21	Loadout dust collector	Alanco 188RLP8	99% efficient	PM/PM10
754	S-22	Hull receiving dust collector	Alanco 42RLR10	99% efficient	PM/PM10
758A	S-22	Hull receiving dust collector	Alanco 42RLR10	99% efficient	PM/PM10
754	S-27	Dust collector	Kice HRB24-10	99% efficient	PM/PM10
175	S-28	Pellet cooler cyclone	Model 1 HE 39 High Efficiency	99% efficient	PM/PM10
CFB-1	S-30	Dust collector	Fuller pulse 8 zone #128 Twin Line	99.4% efficient	PM/PM10
AS-1	S-31	Dust collector	Flex Kleen 84-CTBC-30	99% efficient	PM/PM10
ATL-1	S-32	Dust collector	Cargill design	99% efficient	PM/PM10

\*The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

**Grain Elevator Equipment to be operated consists of:**

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment</b>							
GD-1A	GDS-1	Shanzer Column Grain Dryer, Model 8P7	39.5 mmBtu/hour	Cyclone	GDC-1	PM-10	February 11, 2008
GD-2	GDS-2	Shanzer Column Grain Dryer, Model 8P7	39.5 mmBtu/hour	Cyclone	GDC-2	PM-10	February 19, 2009
<b>Process A</b>							
TL-1/CL-1	TLS-1	Truck/Container Loadout Station	200 tons/hour	Fabric Filter	FF-79	PM-10	February 9, 2007
MVU-1	MVUS-1	Neuero marine vessel Unloading Station	550 tons/hour	Fabric Filter	FF-Neuero	PM-10	June 19, 2002
MVL-1	MVLS-1	Marine vessel Loading - two arms	1680 tons/hour	Fabric Filters	FF-63/64	PM-10	June 5, 1979
TU-1	TUS-1	Truck Unloading Station - two bays	1120 tons/hour	Fabric Filter	FF-67	PM-10	June 19, 2002
TU-2	TUS-2	Old Truck Loading Station - two bays	600 tons/hour	Fabric Filter	FF-79	PM-10	June 5, 1979
RCU-1	RCUS-1	Rail Car Unloading Station	1390 tons/hour	Fabric Filter	FF-65	PM-10	June 5, 1979
RCL-1	RCLS-1	Rail Car Loading Station	600 tons/hour	Fabric Filter	FF-65	PM-10	June 5, 1979
GH-1	GHS-1	Grain Handling which includes: turnheads, weigh stations, ship loading gallery and other internal grain transfer operations	1680 tons/hour	Fabric Filters	Various fabric filters (see below)	PM-10	June 5, 1979
TH-1 to TH4	THS-1	Turnheads for new concrete storage silos	1680 tons/hour	Fabric Filters	FF-69	PM-10	June 19, 1992

WS-1 to WS-4	WSS-1	Weigh Stations for Loading and Unloading	1680 tons/hour	Fabric Filters	FF-65/66	PM-10	June 5, 1979
SLG-1	SLGS-1	Ship Loading Gallery	1680 tons/hour	Fabric Filter	FF-62	PM-10	June 5, 1979
IGT-1	IGTS-1	Internal Grain Transfer Operations	1680 tons/hour	Fabric Filter	FF-68	PM-10	June 5, 1979
SS-1	SSS-1	New Concrete Storage Silos	1.5 million bushels	Fabric Filter	FF-69	PM-10	June 5, 1969
SS-2	SSS-2	Original Steel Storage Silos	5.0 million bushels	Fabric Filter	FF-65/66	PM-10	December, 2006

\*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

#### Pollution Control Equipment Consists of:

Unit Ref. No.	Vent/Stack No.	Device Ref. Number	Control Equipment Description	Manufacturer and Date of Construction	Size/Rated Capacity	Pollutants Controlled
GD-1A	GDS-1	SA-1/C-1	24 mesh screen airs and cyclone	N/A	95% efficient	PM/PM10
GD-2	GDS-2	SA-2/C-2	24 mesh screen airs and cyclone	N/A	95% efficient	PM/PM10
TL-1/CL-1	TLS-1	FF-79	Fabric filter	N/A	99% efficient	PM/PM10
MVU-1	MVUS-1	FF-Neuero	Fabric filter	N/A	99% efficient	PM/PM10
MVL-1	MVLS-1	FF-63/64	Fabric filters	N/A	99% efficient	PM/PM10
TU-1	TUS-1	FF-67/79	Fabric filters	N/A	99% efficient	PM/PM10
TU-2	TUS-2	FF-67/79	Fabric filters	N/A	99% efficient	PM/PM10
RCU-1	RCUS-1	FF-65	Fabric filter	N/A	99% efficient	PM/PM10
RCL-1	RCLS-1	FF-65	Fabric filter	N/A	99% efficient	PM/PM10
GH-1	GHS-1	Various FF	Fabric filters	N/A	99% efficient	PM/PM10
TH-1 to TH4	THS-1	FF-69	Turnheads, new concrete storage silos	N/A	99% efficient	PM/PM10
WS-1 to WS-4	WSS-1	FF-65, 66	Fabric filters	N/A	99% efficient	PM/PM10
SLG-1	SLGS-1	FF-62	Fabric filter	N/A	99% efficient	PM/PM10
IGT-1	IGTS-1	FF-68	Fabric filter	N/A	99% efficient	PM/PM10
SS-1	SSS-1	FF-69	Fabric filter	N/A	99% efficient	PM/PM10
SS-2	SSS-2	Various FF	Fabric filters	N/A	99% efficient	PM/PM10

\*The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

### III. Hull Grinding and Pelletizing Line

*(Emission Unit ID# 132, 136/47, 754, 175 and GD-1)*

#### A. Limitations

1. **Emission Controls** – Particulate emissions from the hopper shall be controlled by a bin vent filter. Particulate emissions from the air cooler shall be controlled by a cyclone. The filter and cyclone shall be provided with adequate access for inspection and shall be in operation when the hull pelletizer is operating. The filter shall be equipped with a device to continuously measure the differential pressure drop across the bin vent filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. An annual internal inspection shall be conducted on the cyclone by the permittee to insure structural integrity.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 3 of 10/5/2009 NSR Permit)
2. **Fugitive Dust** – Fugitive Dust and Fugitive emissions controls shall include the following, or equivalent, as approved by DEQ:
  - a. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all time when in motion.
  - b. Prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
  - c. Dust from material handling, and load-outs, shall be controlled by wet suppression, or equivalent.  
(9 VAC 5-50-90, 9 VAC 5-80-110 and Condition 4 of 10/5/2009 NSR Permit)
3. **Production** – The hull pelletizer operation shall produce no more than 131,400 tons of pellets per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110 and Condition 7 of 10/5/2009 NSR Permit)
4. **Process Emission Limits** - Emissions from the operation of the hull pelletizer process shall not exceed the limits specified below:

Particulate Matter	0.6 lbs/hr	2.6 tons/yr
PM-10	0.6 lbs/hr	2.6 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emissions limits. Compliance with these emission limits may be determined as stated in numbers III.A.1, 3, 5 and III.B.1.  
(9 VAC 5-80-110 and Condition 8 of 10/5/2009 NSR Permit)
5. **Visible Emission Limit** – Visible emissions from the cyclone and bin vent filter shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 9 of 10/5/2009 NSR Permit)

**B. Monitoring**

1. **Monitoring Devices** – The hull pelletizer operation shall be equipped with devices to continuously measure the differential pressure across the bin vent filter. Each monitoring device shall be installed, maintained, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the hull pelletizer is operating.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 5 of 10/5/2009 NSR permit)
2. **Monitoring Device Observation** – To ensure good performance, the bin vent filter monitoring device used to continuously measure the differential pressure drop shall be observed by the permittee with a frequency of not less than once per day. The permittee shall keep a log of the observations from the bin vent filter monitoring device.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 6 of 10/5/2009 NSR permit)
3. **Visible Emissions Evaluation** – The permittee shall check for visible emissions from the bin vent filter and cyclone stacks on a weekly basis. If visible emissions are noted, the permittee shall either take corrective action to eliminate the visible emissions or conduct an EPA Method 9 (40 CFR 60, Appendix A) visible emissions evaluation for a period of 18 minutes. The permittee shall keep a record of the observations, corrective actions and any Method 9 evaluations conducted.  
(9 VAC 5-80-110)

**C. Recordkeeping**

1. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Tidewater Regional Office. These records shall include, but are not limited to:
  - a. Annual production of pellets, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - b. Operation and control device monitoring records for the bin vent filter as required in Condition III.B.2.
  - c. VEE observation records, including any corrective actions taken and any Method 9 evaluations conducted.
  - d. Scheduled and unscheduled maintenance and operator training.These records shall be available for inspection by the DEQ and shall be current for the most recent five years.  
(9 VAC 5-80-110, 9 VAC 5-50-50 and Condition 10 of 10/5/2009 NSR Permit)
2. **Maintenance/Operating Procedures** - At all times, including periods of start-up shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the hull pelletizer operation:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-80-110, 9 VAC 5-50-20 E and Condition 16 of 10/5/2009 NSR Permit)

#### **D. Testing and Notifications**

1. **Emissions Testing** - The hull pelletizer operation shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.  
(9 VAC 5-80-110, 9 VAC 5-50-30 F and Condition 11 of 10/5/2009 NSR permit)
2. **Initial Notifications** - The permittee shall furnish written notification to the Tidewater Regional Office of the actual startup date of the Grain Dust Transfer Line (ref. GD-1) within 15 days after such date.  
(9 VAC 5-80-110, 9 VAC 5-50-50 and Condition 12 of 10/5/2009 NSR permit)
3. **Permit Invalidation** - This permit to modify the hull pelletizer operation shall become invalid unless an extension is granted by the DEQ, if:
  - a. A program of continuous construction, reconstruction, or modification is not commenced with the latest of the following:
    - i. 18 months from the date of the NSR permit, issued October 5, 2009, or;
    - ii. Nine months from the date that the last permit or other authorization was issued from any governmental entity;
    - iii. Nine months from the date of the last resolution of any litigation concerning any such permits or authorization; or
  - b. A program of construction, reconstruction, or modification is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.  
(9 VAC 5-80-110, 9 VAC 5-80-1210 and Condition 13 of 10/5/2009 NSR permit)
4. **Record of Malfunctions** - The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emissions unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.  
(9 VAC 5-80-110, 9 VAC 5-20-180 J and Condition 17 of 10/5/2009 NSR permit)

#### IV. DeSmet Dryer/Cooler Requirements

*(Emission Unit # 156)*

##### A. Limitations

1. **Emission Controls** – Particulate emissions from the dryer/cooler shall be controlled by cyclones. The cyclones shall be provided with adequate access for inspection and shall be in operation when the dryer/cooler is operating.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 3 of 7/9/2003 NSR Permit)
2. **Production** - The production of soybean meal from the dryer/cooler shall not exceed 574,218 tons per year, calculated monthly as the sum of each consecutive 12-month period.  
(9 VAC 5-80-110 and Condition 4 of 7/9/2003 NSR Permit)
3. **Emission Limits** - Emissions from the operation of the dryer/cooler at cyclone vents S-13 and S-14 shall not exceed the limits specified below:

Particulate Matter	10.6 tons/yr
PM-10	2.7 tons/yr
Volatile Organic Compounds (as Hexane)	48.6 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emissions limits. Compliance with these emission limits may be determined as stated in numbers IV.A.1, 2, and 4.

(9 VAC 5-80-110 and Condition 5 of 7/9/2003 NSR Permit)

4. **Visible Emission Limit** – Visible emissions from the dryer/cooler process stacks S-13 and S-14 shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
(9 VAC 5-80-110, 9 VAC 5-50-80 and Condition 6 of 7/9/2003 NSR Permit)

##### B. Testing and Monitoring

1. **Visible Emissions Evaluation** – Quarterly and upon request by the DEQ, the permittee shall conduct visible emission evaluations from the dryer/cooler stacks to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Tidewater Regional Office.  
(9 VAC 5-80-110, 9 VAC 5-50-30 G and Condition 9 of 7/9/2003 NSR Permit)
2. **Testing/Monitoring Ports** – The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. This includes constructing the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing stack or duct that is free from cyclonic flow. Tests ports shall be provided when requested at the dryer/cooler stacks in accordance with the applicable performance specifications (reference 40 CFR Part 60, Appendix B).  
(9 VAC 5-80-110, 9 VAC 5-50-30 F and Condition 10 of 7/9/2003 NSR Permit)

3. **Annual Cyclone Inspections** – An annual visual internal inspection shall be conducted on each cyclone by the permittee to insure structural integrity. The permittee shall keep a log of observations. The logbook shall be kept on site and available for inspection by the DEQ for the most recent 5 year period.

(9 VAC 5-80-110)

**C. Recordkeeping**

1. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Tidewater Regional Office. These records shall include, but are not limited to:
  - a. The annual production of soybean meal from the dryer/cooler calculated monthly, as the sum of each consecutive 12-month's production.
  - b. The results of the annual internal inspections of the cyclones; and
  - c. VEE observation records, including any corrective actions taken and any Method 9 evaluations conducted.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110, 9 VAC 5-50-50 and Condition 8 of 7/9/2003 NSR Permit)



## V. Fuel Burning Equipment Requirements

(Emission Unit ID #CFB-1)

### A. Limitations

1. **Emission Controls** – Sulfur dioxide emissions from the coal-fired boiler will be controlled by burning low-sulfur coal.  
 (9 VAC 5-80-110 and Condition 3 of 1/13/2004 NSR/PSD Permit)
2. **Emission Controls** – Particulate emissions from the coal-fired boiler will be controlled by a fabric filter. The fabric filter shall be provided with adequate access for inspection.  
 (9 VAC 5-80-110 and Condition 4 of 1/13/2004 NSR/PSD Permit)
3. **Emission Controls** – Particulate emissions from the ash silo will be controlled by a fabric filter. The fabric filter shall be provided with adequate access for inspection.  
 (9 VAC 5-80-110 and Condition 5 of 1/13/2004 NSR/PSD Permit)
4. **Approved Fuel** – The approved fuel for the boiler is bituminous coal. A change in the fuel may require a permit to modify and operate.  
 (9 VAC 5-80-110 and Condition 6 of 1/13/2004 NSR/PSD Permit)
5. **Fuel Throughput** – The annual throughput of coal for the boiler shall not exceed 31,400 tons per year, calculated monthly as the sum of each consecutive 12-month period. The throughput is also limited by the sulfur dioxide emission limit of 441.5 tons per year. The amount of coal that can be burned in any 12-month period and still meet the emission limit for sulfur dioxide can be calculated using the following equation:

[Maximum Coal = 23,236 / 12-month weighted average for sulfur; in percent]

(9 VAC 5-80-110 and Condition 7 of 1/13/2004 NSR/PSD Permit)

6. **Emission Limits** – Emissions from the operation of the coal-fired boiler shall not exceed the limits specified below:

Particulate Matter	0.4 lbs/hour	1.6 tons/year
	0.5 lbs/mmBtu	
PM-10	0.3 lbs/hour	1.2 tons/year
Sulfur Dioxide	149.2 lbs/hour	441.5 tons/year
	1.52 lbs/mmBtu	
Nitrogen Oxides	43.2 lbs/hour	172.5 tons/year
Carbon Monoxide	19.6 lbs/hour	78.5 tons/year
Volatile Organic Compounds	2.0 lbs/hour	7.9 tons/year

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers V.A.1, 2, 4, 5, 7 and V.B.1.

(9 VAC 5-80-110 and Condition 8 of 1/13/2004 NSR/PSD Permit)

7. **Limits on Coal** – The coal shall meet the specifications listed below:  
Minimum Heat Content (weighted 12-month average): 13,500 Btu/lb HHV  
Maximum Ash Content (weighted 12-month average): 8.0 % ash by weight  
(9 VAC 5-80-110 and Condition 9 of 1/13/2004 NSR/PSD Permit)
8. **Visible Emission Limit** – Visible emissions from the fabric filter on the boiler shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
(9 VAC 5-80-110 and Condition 10 of 1/13/2004 NSR/PSD Permit)
9. **Visible Emission Limit** – Visible emissions from the fabric filter for the ash silo operation shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
(9 VAC 5-80-110 and Condition 11 of 1/13/2004 NSR/PSD Permit)

## **B. Monitoring**

1. **Visible Emissions Evaluation** – The permittee shall check for visible emissions from the ash silo fabric filter during normal operation with a frequency of not less than once per week. If visible emissions are noted, the permittee shall either take corrective action to eliminate the visible emissions or conduct an EPA Method 9 (40 CFR 60, Appendix A) visible emissions evaluation for a period of at least 18 minutes. The permittee shall keep a log of observations, corrective actions and any Method 9 evaluations conducted.  
(9 VAC 5-80-110 and Condition 12 of 1/13/2004 NSR/PSD Permit)
2. **Visible Emissions Evaluation** – The permittee shall perform periodic visual observations of the boiler fabric filter once weekly for compliance with opacity standards. Such observations shall consist of one six-minute observation of visible emissions. If such a periodic observation indicates opacity greater than 20%, the permittee shall undertake a second six-minute observation of visible emissions. If the second observation also exceeds 20% opacity, the permittee shall take appropriate action to correct the cause of the opacity. Following corrective action, the permittee shall conduct a third six-minute observation of visible emissions. If corrective action has failed to correct the problem, the permittee shall conduct a visible emissions evaluation (VEE) utilizing EPA Method 9 (reference 40 CFR 60, Appendix A). The permittee shall keep a log of observations, corrective actions and any Method 9 evaluations conducted. The logbook shall be kept on site and available for inspection by the DEQ for the most recent 5 year period.  
(9 VAC 5-80-110 and 9 VAC 5-50-110)

### **C. Recordkeeping**

1. **On Site Records** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
  - a. The yearly throughput of coal for the boiler calculated monthly as the sum of each consecutive 12-month period.
  - b. All coal shipments purchased, indicating the sulfur, ash and Btu content of the coal.
  - c. 12-month weighted averages of sulfur and ash content, and the Higher Heating Value in Btu per pound for the coal shipment.
  - d. Annual SO<sub>2</sub> emissions, calculated monthly as the sum of each consecutive 12-month period.
  - e. Monitoring results to include observer name, date, time and observation results.
  - f. A description of corrective action taken in response to visual emissions monitoring, to include date action was completed.

These records shall be available for inspection by the DEQ and shall be current for the most recent five-year period.

(9 VAC 5-80-110 and Condition 13 of 1/13/2004 NSR/PSD Permit)

## VI. Fuel Burning Equipment Requirements - Temporary Boiler

*(Emission Unit ID #TB-1)*

### A. Limitations

1. **Emission Controls** – Emissions from the temporary boiler (Unit No. TB-1) shall be minimized by the use of clean burning fuel, good combustion practices, and proper maintenance procedures. The temporary boiler shall be provided with adequate access for inspection.  
(9 VAC 5-80-110 and Condition 3 of 3/16/2010 NSR Permit)
2. **Emission Controls** – Nitrogen Oxide (NO<sub>x</sub>) emissions from the temporary boiler (TB-1) shall be controlled by low NO<sub>x</sub> burners. The low NO<sub>x</sub> burners shall be operated in accordance with the manufacturer's specifications.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 4 of 3/16/2010 NSR Permit)
3. **Temporary Boiler Restrictions** – The temporary boiler (TB-1), shall be limited to a maximum rated heat-input capacity of 96 mmBtu/hour or less. Operation of the temporary boiler shall not be allowed during operation of the 106.0 mmBtu/hour coal-fired boiler (CFB-1) while located at the soybean processing facility. Only one (1) of the two (2) boiler units may be operated at any given time.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 5 of 3/16/2010 NSR Permit)
4. **Consecutive Days On-site Limit for the Temporary Boiler** – The on-site residency of the temporary boiler (TB-1) at the Perdue Chesapeake Soybean Plant shall not exceed 180 consecutive days.  
(9 VAC 5-80-110 and Condition 6 of 3/16/2010 NSR Permit)
5. **Approved Fuel** – The approved fuel for the temporary boiler (TB-1) is natural gas. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-110 and Condition 7 of 3/16/2010 NSR Permit)
6. **Fuel Throughput** – The temporary boiler (TB-1) shall not consume more than 440 million cubic feet of natural gas per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be determined monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110 and Condition 8 of 3/16/2010 NSR Permit)
7. **Fuel Specifications** – The natural gas combusted in the temporary boiler (TB-1) shall meet the specifications below:  
Minimum heat content: 1000 Btu/cubic foot HHV as determined by ASTM D1826, D2382, or a DEQ-approved equivalent method.  
(9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 9 of 3/16/2010 NSR Permit)

8. **Emission Limits** – Emissions from the operation of the temporary boiler (TB-1) shall not exceed the limits specified below:

Particulate Matter	0.72 lbs/hour	1.7 tons/year
Nitrogen Oxides (as NO <sub>2</sub> )	43.2 lbs/hour	11.0 tons/year
Carbon Monoxide	7.91 lbs/hour	18.5 tons/year
Volatile Organic Compounds	0.52 lbs/hour	1.2 tons/year

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers VI.A.1, 2, 4-7 and VI.B.1.

(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 10 of 3/16/2010 NSR Permit)

9. **Visible Emission Limit** – Visible emissions from the temporary boiler (TB-1) shall not exceed ten (10) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty (20) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
(9 VAC 5-80-110 and Condition 11 of 3/16/2010 NSR Permit)

10. **Visible Emissions Observations** – The permittee shall observe the stack of the temporary boiler (TB-1) for a minimum of six (6) minutes and at least once per week (Monday - Sunday) during daylight hours of operations for visible emissions. If visible emissions are noted from the stack, operational adjustments or maintenance shall be performed on the boiler to eliminate the visible emissions. Should visible emissions continue after these actions have been undertaken, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds 10 percent, the VEE shall continue for one (1) hour from initiation to determine compliance with the opacity limit. If compliance is not demonstrated by this VEE, timely corrective action shall be taken to bring the boiler back to compliance. Results of the visible observations and/or VEEs shall be recorded in a logbook. These records shall include, but not be limited to, the name of the observer, date and time of the observation, an indication of presence or absence of visible emissions, whether the emissions are representative of normal operation and if the emission are not representative, the cause of abnormal emissions, the duration of any visible emission incident, and any corrective action to eliminate visible emissions. If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A).

(9 VAC 5-80-110 and Condition 12 of 3/16/2010 NSR Permit)

11. **Requirements by Reference (NSPS)** - Except where this permit is more restrictive than the applicable requirement, the temporary boiler (TB-1) as described in Section II shall be operated in compliance with the requirements of 40 CFR 60, Subpart Dc.

Note: All applicable requirements of 40 CFR 60, Subpart Dc may not be specifically listed in this permit. The permittee should refer to the applicable regulation for additional requirements not included in this permit.

(9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 13 of 3/16/2010 NSR Permit)

## **B. Recordkeeping**

1. **On Site Records** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Tidewater Regional Office (Air Compliance/Inspection). These records shall include, but are not limited to:
  - a. Installation and removal dates for each temporary boiler installed;
  - b. Monthly and annual throughput of natural gas in cubic feet for the temporary boiler (TB-1), while installed at the Perdue Chesapeake Soybean Plant. The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;
  - c. Record logs for all visible emission evaluations (VEE) and visible observations performed on the temporary boiler (TB-1) while installed at the Perdue Chesapeake Soybean Plant;
  - d. Operator training; and
  - e. All notifications.

These records shall be available for inspection by the DEQ and shall be current for the most recent five-year period.

(9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 14 of 3/16/2010 NSR Permit)

## **C. Notifications**

1. **Initial Notifications** - The permittee shall furnish written notification to the Tidewater Regional Office (Air Compliance/Inspection) of:
  - a. The actual date on which installation of the temporary boiler (TB-1) commenced within 30 calendar days after such date; and
  - b. The actual start-up date of the temporary boiler (TB-1) within 15 calendar days after such date.

One additional copy of the written notifications referenced in items a and b above is sent to:

Associate Director  
Office of Air Enforcement (3AP10)  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

(9 VAC 5-80-110, 9 VAC 5-50-50 and Condition 15 of 3/16/2010 NSR permit)

2. **Temporary Boiler Removal Notification** - The permittee shall submit written notification to the DEQ Tidewater Regional Office (Air Compliance/Inspection) of the temporary boiler removal from the Perdue Chesapeake Soybean Plant upon completion of repairs to the coal-fired boiler. Failure to submit this written notification may subject the facility to enforcement action.  
(9 VAC 5-80-110 and Condition 16 of 3/16/2010 NSR Permit)

3. **Permit Invalidation** - This permit to install and operate the temporary boiler (TB-1) shall become invalid unless an extension is granted by the DEQ, if the first installation of the temporary boiler is not commenced (because the need for a temporary boiler to supply steam has not occurred) within the latest of the following:
  - a. Eighteen (18) months from the date of the NSR permit, issued March 16, 2010, or;
  - b. Nine (9) months from the date that the last permit or other authorization was issued from any governmental entity; or
  - c. Nine (9) months from the date of the last resolution of any litigation concerning any such permits or authorization.(9 VAC 5-80-110, 9 VAC 5-80-1210 and Condition 17 of 3/16/2010 NSR permit)
4. **Record of Malfunctions** - The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emissions unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.  
(9 VAC 5-80-110, 9 VAC 5-20-180 J and Condition 20 of 3/16/2010 NSR permit)

## VII. National Emission Standards for Hazardous Air Pollutants, 40 CFR 63, Subpart GGGG

1. **Applicable Regulations** – The Perdue oilseed plant is subject to the regulations for Solvent Extraction for Vegetable Oil Production at 40 CFR Part 63, Subpart GGGG. The regulation was promulgated on April 12, 2001 and, as an existing category source, Perdue must show compliance with the requirements of the regulation by April 12, 2004.  
(9 VAC 5-80-110 and 40 CFR 63.2830 to 2872)
2. **Emission Requirements** – The permittee must calculate a compliance ratio, which compares your actual HAP loss to your allowable HAP loss (Equation 1) for the previous 12 operating months. An operating month is any calendar month in which a source processes any listed oilseed, excluding any entire calendar month in which the source operated under an initial startup period subject to 40 CFR 63.2850(e)(2) or (d)(2) or a malfunction period subject to 40 CFR 63.2850(e)(2). If records of total solvent loss are kept, Equation 2 may be used to calculate the compliance ratio:

### Equation #1

$$\text{Compliance Ratio} = [\text{Actual Hap Loss} / \text{Allowable Hap Loss}]$$

### Equation #2

$$\text{Compliance Ratio} = [f * \text{Actual Solvent Loss} / 0.64 * \sum (i=1 \text{ to } n)((\text{Oilseed})_i * (\text{SLF})_i)]$$

Where: f = The weighted average volume fraction of HAP in solvent during the previous 12 operating months, as determined in 40 CFR 63.2854, dimensionless. The factor '0.64' equals the average volume fraction of HAP in solvent in the baseline performance data, dimensionless.

Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months, as determined in 40 CFR 63.2853. Oilseed = Tons of each oilseed type (here soybeans) "i" processed during the previous 12 operating months, as shown in 40 CFR 63.2855. SLF = the corresponding solvent loss factor in [gallons per ton] for each type of oilseed "i".

(9 VAC 5-80-110 and 40 CFR 63.2840)

3. **Compliance Requirements** – The permittee shall comply with the hazardous pollutant emissions standards by adhering to the following requirements:
  - a. Submit the necessary notifications, as applicable, in accordance with 40 CFR 63.2860.
  - b. Develop and implement a plan for demonstrating compliance in accordance with 40 CFR 63.2851.
  - c. Develop a written startup shutdown and malfunction (SSM) plan in accordance with the provisions in 40 CFR 63.2852.
  - d. Maintain all necessary records you have used to demonstrate compliance with the regulation in accordance with 40 CFR 63.2862.
  - e. Submit the reports as required by the regulations at 40 CFR 63.2861(a), (c) & (d).
  - f. Within 15 days of the beginning date of a malfunction as defined by 40 CFR 63.2, the permittee shall choose to comply with one of the options defined in the regulations at 40 CFR 63.2850 (e)(1) through (e)(2).

(9 VAC 5-80-110 and 40 CFR 63.2850)



4. **Facility Plan for Demonstrating Compliance** – The permittee must develop and implement a written plan for demonstrating compliance that provides the detailed procedures that the facility will follow to monitor and record data necessary for demonstrating compliance with the regulations. The permittee shall keep the ‘plan’ on-site and readily available as long as the facility is operational. If any changes are made to the ‘plan’ for demonstrating compliance, then you must keep all previous versions of the plan and make them readily available for inspection for at least 5 years after each revision. The ‘plan’ for demonstrating compliance must include the following items:
  - a. The name and address of the owner or operator.
  - b. The physical address of the vegetable oil production process.
  - c. A detailed description of all methods of measurement used to determine your solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.
  - d. When each measurement will be made.
  - e. Examples of each calculation used to determine your compliance status. Include examples of how you will convert data measured with one parameter to other items for use in compliance determination.
  - f. Example logs of how data will be recorded.
  - g. A plan to ensure that the data continue to meet compliance demonstration needs.  
(9 VAC 5-80-110 and 40 CFR 63.2851)
5. **Notifications** – The permittee shall submit the one-time notifications, as appropriate, to the Tidewater Regional Office as listed below:
  - a. Any existing or new source that plans to undergo a significant modification as defined in 40 CFR 63.2872 must submit two reports as described in 40 CFR 63.2860 (c).
  - b. As an existing source you must submit a notification of compliance status report to the DEQ not later than 60 days after determining your initial 12 operating months ‘compliance ratio’. If you are an existing source, you generally must submit this notification no later than 50 calendar months after the effective date of these NESHAP (36 calendar months for compliance, 12 operating months to record data and 2 calendar months to complete the report). The notification of compliance status must contain the items in 40 CFR 63.2860 (d)(1) to (d)(6).  
(9 VAC 5-80-110 and 40 CFR 63.2860 (a), (c), and (d))
6. **Reports and Schedules** – After the initial notifications, the following reports shall be submitted to the DEQ at the appropriate time intervals:
  - a. The first annual compliance certification is due 12 calendar months after the initial notification of compliance status. Recurring compliance certifications shall be submitted annually.
  - b. Submit a deviation report in accordance with 40 CFR 63.2861(b) for each compliance determination in which the compliance ratio exceeds 1.00 as determined under 40 CFR 63.2840(c). Submit the deviation report by the end of the month following the calendar month in which you determined the deviation.
  - c. If you choose to operate your facility under an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2), or a malfunction period subject to 40 CFR 63.2850 (e)(2), you must submit a periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred.

- d. If you handle a SSM during an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2) or a malfunction period subject to 40 CFR 63.2850(e)(2) differently from procedures in the SSM plan and the relevant emission requirements in 40 CFR 63.2840 are exceeded, then you must submit an immediate SSM report. Immediate SSM reports consist of telephone call or facsimile transmission to the DEQ within 2 working days after starting actions inconsistent with the SSM plan, followed by a letter within 7 working days after the end of the event.  
(9 VAC 5-80-110 and 40 CFR 63.2861)
7. **Recordkeeping** – The permittee shall satisfy the recordkeeping requirements by the compliance date for the facility as specified in Table 1 of 40 CFR 63.2834. These records include but are not limited to:
- a. A plan for demonstrating compliance and a SSM plan;
  - b. A complete record of solvent inventory, including beginning and ending inventories, dates of operating period, solvent received, purchased and recovered during each calendar month, all solvent inventory adjustments, additions or subtractions, the total solvent loss for each calendar month and the actual solvent loss in gallons for each operating month;
  - c. The weighted average volume fraction of HAP in the extraction solvent;
  - d. A complete record of soybean inventory, including beginning and ending inventories, the current operating status of the facility, soybeans received, all soybean inventory adjustments, additions or subtractions for normal operating periods and the tons of soybeans processed during each operating month;
  - e. Facilities that have completed 12 operating months and are not operating under an initial startup period or a malfunction period shall keep the following records:
    - (1) The 12 operating months rolling sum of the actual solvent loss in gallons;
    - (2) The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months;
    - (3) The 12 operating months rolling sum of soybeans processed at the facility;
    - (4) A determination of the compliance ratio;
    - (5) A statement of the facility's compliance status with all of the requirements in 40 CFR 63.2850;
  - f. For each SSM event subject to an initial startup period or a malfunction period, the permittee shall keep records of the following information:
    - (1) A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction;
    - (2) An estimate of the solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation;
    - (3) A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period;
  - g. Facility records must be in a form suitable and readily available for review in accordance with 40 CFR 63.10(b)(1). Each record must be kept for 5 years following the date of each occurrence,

measurement, corrective action, report or record. These records must be kept on-site for at least two years and may be kept off-site for the remaining 3 years.  
(9 VAC 5-80-110 and 40 CFR 63.2862 and 63.2863)

8. **NESHAP General Provisions** – The General Provisions of 40 CFR 63, Subpart A shall apply to the extraction process as stated in Table 1 of 40 CFR 63.2870 of the Solvent Extraction for Vegetable Oil, Maximum Available Control Technology (MACT) standard.  
(9 VAC 5-80-110 and 40 CFR 63.2870)

## VIII. Fuel Burning Equipment Requirements – Grain Dryers

*(Emission Unit ID# GD-1A and GD-2)*

### A. Limitations

1. **Fuel** - The approved fuel for the grain dryers (emission unit ID# GD-1A and GD-2) is natural gas. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-110 and Condition 22 of 2/19/2009 State Operating Permit)
2. **Fuel Throughput** - The natural gas-fired grain dryers, combined shall consume no more than 154 million cubic feet of natural gas per year, calculated monthly as the sum of each consecutive twelve (12) month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110 and Condition 23 of 2/19/2009 State Operating Permit)
3. **Emission Limits - Grain Dryer** - Emissions from the operation of the grain dryers shall not exceed the limits specified below:

	<u>Each</u>	<u>Combined</u>	
Particulate Matter	3.9 lbs/hr	10.2 tons/yr	(9 VAC 5-50-260)
PM-10	1.1 lbs/hr	3.0 tons/yr	(9 VAC 5-50-260)
Nitrogen Oxides (as NO <sub>2</sub> )	2.0 lbs/hr	7.2 tons/yr	(9 VAC 5-50-260)
Carbon Monoxide	1.7 lbs/hr	3.1 tons/yr	(9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers IX.A.7, IX.A.12, and Conditions 1 and 2 of this section.

(9 VAC 5-80-110, and Condition 26 of 2/19/2009 State Operating Permit)

4. **Visible Fugitive Emission Limit** - Grain Handling Operations (NSPS) - Visible fugitive emissions from the grain handling operations, including the Shanzer grain dryer shall not exceed zero (0) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
(9 VAC 5-80-110, 40 CFR 60, Subpart 60.302 (c)(2), and Condition 30 of 2/19/2009 State Operating Permit)
5. **Requirements by Reference** - Except where this permit is more restrictive than the applicable requirement, the NSPS equipment (Shanzer Grain Dryers) shall be operated in compliance with the requirements of 40 CFR 60, Subpart DD.  
(9 VAC 5-50-400, 9 VAC 5-50-410 and Condition 24 of 2/19/2009 State Operating Permit)

## **B. Records**

1. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to the annual throughput of natural gas to the grain dryer, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. These records shall be available for inspection by the DEQ and shall be current for the most recent 5 years.  
(9 VAC 5-80-110 and Condition 33 (a) of 2/19/2009 State Operating Permit)

## **IX. Process Equipment Requirements**

*(Emission Unit ID# GD-1A, GD-2, TL-1/CL-1, MVU-1, MVL-1, TU-1, TU-2, RCU-1, RCL-1, GH-1, SS-1 and SS-2)*

### **A. Limitations**

1. **Emission Controls - Vessel Unloading** - Particulate emissions from the marine vessel unloader (MVU-1) shall be controlled by a fabric filter (FF-Neuro) and a telescoping pneumatic pickup pipe. The fabric filter shall be provided with adequate access for inspection and shall be in operation when the marine vessel unloader is operating.  
(9 VAC 5-80-110, 9 VAC 5-50-260, 40 CFR 60.302 (d)(3) and Condition 3 of 2/19/2009 State Operating Permit)
2. **Emission Controls - Vessel Loading** - Particulate emissions from all marine vessel loading (MVL-1) shall be controlled by fabric filters (FF-63 and FF-64). Each fabric filter shall be provided with adequate access for inspection and shall be in operation when associated marine vessel loading is underway. The height of each loading spout, during loading operations, should be held at the position necessary to prevent as much fugitive emissions leaving the hold of the vessel as possible.  
(9 VAC 5-80-110, 9 VAC 5-50-260, 40 CFR 60.302 (c)(4) and Condition 4 of 2/19/2009 State Operating Permit)
3. **Emission Controls - Rail Car Loading/Unloading** - Particulate emissions from all rail car loading and unloading (RCU-1 and RCL-1) shall be controlled by a fabric filter (FF-65). The fabric filter shall be provided with adequate access for inspection and shall be in operation when the associated rail car loading or unloading is operating.  
(9 VAC 5-80-110, 9 VAC 5-50-260, 40 CFR 60.302 (c)(1) and Condition 5 of 2/19/2009 State Operating Permit)
4. **Emission Controls - Truck Unloading** - Particulate emissions from all truck unloading operations (TU-1 and TU-2) shall be controlled by fabric filters (FF-67 and FF-79). Each fabric filter shall be provided with adequate access for inspection and shall be in operation when the associated truck unloading is operating.  
(9 VAC 5-80-110, 9 VAC 5-50-260, 40 CFR 60.302 (c)(1) and Condition 6 of 2/19/2009 State Operating Permit)

5. **Emission Controls - Grain Handling Operations** - Particulate emissions from all grain handling operations (GH-1) shall be controlled by a fabric filters (FF-62, 65, 66, 68 and 69). Each fabric filter shall be provided with adequate access for inspection and shall be in operation when grain handling operations are underway.  
(9 VAC 5-80-110, 9 VAC 5-50-260, 40 CFR 60.302 (c)(2) and Condition 7 of 2/19/2009 State Operating Permit)
6. **Emission Controls - New Storage Silo Vents** - Particulate emissions from the new storage silos vents (SS-1) shall be controlled by a fabric filter (FF-69). The fabric filter shall be provided with adequate access for inspection and shall be in operation when grain transfer to the storage silos is operating.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 8 of 2/19/2009 State Operating Permit)
7. **Emission Controls - Grain Dryer** - Particulate emissions from the natural gas-fired grain dryers (GD-1A/GD-2) shall be controlled by a 24 mesh 'screen airs' and cyclone on the recirculating side of the dryer. The mesh screen and the cyclone shall be provided with adequate access for inspection and shall be in operation when the grain dryer is operating.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 9 of 2/19/2009 State Operating Permit)
8. **Emission Controls - Truck and Container Loading** - Particulate emissions from all truck and container loading operations (TL-1/CL-1) shall be controlled by a fabric filter (FF-79). The fabric filter shall be provided with adequate access for inspection and shall be in operation when the associated truck unloading is operating.  
(9 VAC 5-80-110, 9 VAC 5-50-260, 40 CFR 60.302 (c)(3) and Condition 10 of 2/19/2009 State Operating Permit)
9. **Throughput - Truck Unloading** - The grain throughput of the new and old truck unloading stations (TU-1 and TU-2 combined) shall not exceed 1,875,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 13 of 2/19/2009 State Operating Permit)
10. **Throughput - Rail Car Unloading** - The grain throughput of the rail car unloading station (RCU-1) shall not exceed 1,910,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 14 of 2/19/2009 State Operating Permit)
11. **Throughput - Marine Vessel Unloading** - The grain throughput of the marine vessel unloading station (MVU-1) shall not exceed 1,345,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 15 of 2/19/2009 State Operating Permit)

12. **Throughput - Grain Dryer** - The grain throughput of the grain dryer (GD-1A) shall not exceed 1,000,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 16 of 2/19/2009 State Operating Permit)
13. **Throughput - Grain Handling Operations** - The grain and grain products (meal) throughput for the internal grain handling operations (GH-1) shall not exceed 24,520,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 17 of 2/19/2009 State Operating Permit)
14. **Throughput - Storage Silos** - The grain and grain products (meal) throughput for the new and old storage silos (SS-1 and SS-2 combined) shall not exceed 6,130,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 18 of 2/19/2009 State Operating Permit)
15. **Throughput - Rail Car Loading** - The grain and grain products (meal) throughput of the rail car loading station (RCL-1) shall not exceed 530,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 19 of 2/19/2009 State Operating Permit)
16. **Throughput - Marine Vessel Loading** - The grain and grain products (meal) throughput of the marine vessel loading station (MVL-1) shall not exceed 5,500,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 20 of 2/19/2009 State Operating Permit)
17. **Throughput - Truck and Container Loading** - The grain and grain products (meal) throughput of the truck and container loading facilities (TL-1/CL-1) shall not exceed 100,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 21 of 2/19/2009 State Operating Permit)

18. **Emission Limits** - Emissions from the fabric filters or screens associated with the following emissions points shall not exceed the limits specified below:

<u>Operation</u>	<u>NSPS</u>	<u>PM</u>	<u>PM10</u>
Truck Unloading	0.01 gr/dscf	16.0 tons/yr	5.0 tons/yr
Rail Car Unloading	0.01 gr/dscf	4.8 tons/yr	1.2 tons/yr
Marine Vessel Unloading	0.01 gr/dscf	1.2 tons/yr	0.3 tons/yr
Column Grain Dryers	N/A	9.6 tons/yr	2.4 tons/yr
Marine Vessel Loading	0.01 gr/dscf	20.9 tons/yr	5.2 tons/yr
Rail Car Loading	0.01 gr/dscf	0.1 tons/yr	0.01 tons/yr
Internal Handling - All	0.01 gr/dscf	22.0 tons/yr	12.3 tons/yr
Storage Silo Loading	N/A	12.7 tons/yr	11.4 tons/yr
Truck/Container Loading	0.01 gr/dscf	0.5 tons/yr	0.2 tons/yr

These emissions are derived from the estimated overall emission contributions from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined from the listed Conditions.

The particulate standard; gr/dscf applies to dust collector exhausts. Test methods and procedures described in 40 CFR 60.303 are to be used for any compliance demonstrations for gr/dscf limitations.

(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 25 of 2/19/2009 State Operating Permit)

19. **Facility-Wide Emission Limits** - Total emissions from the operation of the grain elevator facility shall not exceed the limits specified below:

Particulate Matter	88.4 tons/yr	(9 VAC 5-50-260)
PM-10	38.7 tons/yr	(9 VAC 5-50-260)
Nitrogen Oxides (as NO <sub>2</sub> )	7.7tons/yr	(9 VAC 5-50-260)
Carbon Monoxide	6.5tons/yr	(9 VAC 5-50-260)

(9 VAC 5-80-110, and Condition 27 of 2/19/2009 State Operating Permit)

20. **Visible Emission Limit - Fabric Filters (NSPS)** - Visible emissions from the control equipment (each fabric filter) associated with truck loading and unloading, rail loading and unloading, marine vessel loading and unloading and grain handling operations shall not exceed 0% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-80-110, 40 CFR 60.302 (b)(2) and Condition 28 of 2/19/2009 State Operating Permit)

21. **Visible Fugitive Emission Limit - Loading/Unloading (NSPS)** - Visible fugitive emissions from the truck unloading, rail loading and unloading operations shall not exceed 5% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-80-110 and Condition 29 of 2/19/2009 State Operating Permit)



22. **Visible Fugitive Emission Limit - Grain Handling Operations (NSPS)** - Visible fugitive emissions from the grain handling operations, including the Shanzer grain dryers shall not exceed 0% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-80-110 and Condition 30 of 2/19/2009 State Operating Permit)
23. **Visible Fugitive Emission Limit - Truck and Container Loading (NSPS)** - Visible fugitive emissions from the truck and container loading operations shall not exceed 10% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-80-110 and Condition 31 of 2/19/2009 State Operating Permit)
24. **Visible Fugitive Emission Limit - Marine Vessel Loading (NSPS)** - Visible fugitive emissions from the marine vessel loading operations shall not exceed 20% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-80-110, 40 CFR 60.303 (c)(4) and Condition 32 of 2/19/2009 State Operating Permit)

## **B. Monitoring**

1. **Monitoring Devices** - All fabric filters shall be equipped with devices to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the associated processes are operating.  
(9 VAC 5-80-110 and Condition 11 of 2/19/2009 State Operating Permit)
2. **Monitoring Device Observation** - To ensure good performance, the monitoring devices used to continuously measure differential pressure drop across the fabric filters shall be observed by the permittee with a frequency of not less than once per week. The permittee shall keep a log of the observations from the monitoring devices.  
(9 VAC 5-80-110 and Condition 12 of 2/19/2009 State Operating Permit)
3. **Visible Emission Monitoring for Fugitive Emissions Sources** - The permittee shall perform periodic visual observations of fugitive emission areas of the facility (loading/unloading of trucks, rail cars, marine vessels, containers, and the grain handling operations) during normal operation once weekly to show compliance with opacity standards. Such observations shall consist of one six-minute observation of visible emissions. If visible emissions are noted, the permittee shall take corrective action to eliminate the visible emissions. The permittee shall keep a log of all observations and any corrective actions taken. The logbook shall be kept on site and available for inspection by the DEQ for the most recent 5 year period.  
(9 VAC 5-80-110 and 9 VAC 5-50-110)

## **C. Recordkeeping**

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
  - a. Annual throughput combined, of natural gas to the grain dryers, calculated monthly as the sum of each consecutive twelve (12) month period. Compliance for the consecutive 12-month period

shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 month.

- b. Annual throughput of grain unloaded from trucks, calculated monthly as the sum of each 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 month.
- c. Annual throughput of grain unloaded from rail cars, calculated monthly as the sum of each 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 month.
- d. Annual throughput of grain unloaded from marine vessels, calculated monthly as the sum of each 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 month.
- e. Annual throughput of grain and grain products (meal) loaded into rail cars, calculated monthly as the sum of each 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 month.
- f. Annual throughput of grain and grain products (meal) loaded into marine vessels, calculated monthly as the sum of each 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 month.
- g. Annual throughput of grain fed into the grain dryers combined, calculated monthly as the sum of each 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 month.
- h. Annual throughput of grain and grain products (meal) fed through the grain handling operation, calculated monthly as the sum of each 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 month.
- i. Annual throughput of grain and grain products (meal) fed through the new and old storage silos (combined), calculated monthly as the sum of each 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 month.
- j. Annual throughput of grain loaded into trucks and containers, calculated monthly as the sum of each 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 month.
- k. Operation and control device monitoring records for each fabric filter as required in Condition Nos. IX.B.1 & B.2.
- l. Results of all stack tests, visible emissions evaluations and performance evaluations.
- m. Scheduled and unscheduled maintenance and operator training.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 33 of 2/19/2009 State Operating Permit)

## X. Facility Wide Conditions

### A. Limitations

1. **Existing Source Standard for Particulate Matter** – No owner or other person shall cause or permit to be discharged into the atmosphere from any process unit any particulate emissions in excess of the limits as listed in Table 4-4A of the Regulations at 9 VAC 5-40-260. This standard is applicable to the following emissions units: W, V, Z, Y, X, 40, 104, 107A-E, 111, 130, 101, 102, 116, 119, 113A-F/520, 113H-M/521, 50, 163/532, 164/533, 44, 48, 75, 1001, 443, 444, 758A, AS-1 and ATL-1.  
(9 VAC 5-40-260 and 9 VAC 5-80-110)
2. **Maximum Allowable Emission Rate for Particulate** – The total process weight rate for each individual process unit at a plant or premises shall be used for determining the maximum allowable emission rate or particulate that passed through a stack or stacks.  
(9 VAC 5-40-22 C.1., 9 VAC 5-40-260B and 9 VAC 5-80-110)
3. **Determining Individual Emission Rates** – Unless otherwise specified, the allowable particulate mass emission rate shall be determined for individual units of equipment.  
(9 VAC 5-40-22 C.2., 9 VAC 5-40-260B and 9 VAC 5-80-110)
4. **Interpolation of Values** – Unless otherwise specified or unless an equation is provided the particulate emission limit above the maximum process weight rate shall be determined by linear interpolation. For interpolation between two values on a process weight rate table the following equation should be used:

$$E = [E_G - E_L] \left[ \frac{P - P_L}{P_G - P_L} \right] + E_L$$

where:

$E$  = emission rate being calculated

$E_L$  = emission rate for  $P_L$  as determined from the process weight rate table

$E_G$  = emission rate for  $P_G$  as determined from the process weight rate table

$P$  = process weight rate of the unit

$P_L$  = process weight rate in the process weight rate table which is closest to but less than the process weight rate of the unit

$P_G$  = process weight rate listed in the process weight rate table which is closes to but greater than the process weight rate of the unit

(9 VAC 5-40-22 C.3., 9 VAC 5-40-260 B and 9 VAC 5-80-110)

5. **Interpretation of Regulations** – Where the nature of any process or design of any equipment is such as to permit more than one interpretation of a regulation, the interpretation that results in the minimum value for allowable emissions shall apply.  
(9 VAC 5-40-22 C.4., 9 VAC 5-40-260B and 9 VAC 5-80-110)

6. **Interpolation Equation** - Interpolation of the data in 9 VAC 5-40-260 A (Table 4-4A) for process weight rates up to 60,000 lb/hr shall be accomplished by use of the following equation:

$$E = 4.10P^{0.67}$$

where:

$E$  = emission rate in lb/hr

$P$  = process weight rate in tons/hr

(9 VAC 5-40-260 C and 9 VAC 5-80-110)

7. **Extrapolation Equation** – Interpolation and extrapolation of the data for process weight rates in excess of 60,000 lb/hr shall be accomplished by use of the following equation:

$$E = 55.0P^{0.11} - 40$$

where:

$E$  = emission rate in lb/hr

$P$  = process rate in tons/hr

(9 VAC 5-40-260 D and 9 VAC 5-80-110)

8. **Existing Source Standard for Visible Emissions** – Unless specified otherwise in this part, no owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any visible emissions which exhibit greater than twenty (20) percent opacity, except for one six-minute period in any hour of not more than sixty (60) percent opacity. Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section. This standard is applicable to the following emission units: W, V, Z, Y, X, 40, 104, 107A-E, 111, 130, 101, 102, 116, 119, 113A-F/520, 113H-M/521, 50, 163/532, 164/533, 44, 48, 75, 1001, 443, 444, 758A, AS-1 and ATL-1.  
(9 VAC 5-40-80, 9 VAC 5-40-940 and 9 VAC 5-80-110)

9. **New Source Standard for Visible Emissions** – No owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity. Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this condition. This standard is applicable to Emission Units 132, 136/43, 754, 175, and 156.  
(9 VAC 5-50-80 and 9 VAC 5-80-110)

10. **Notification for Control Equipment Maintenance** - The permittee shall furnish notification to the Tidewater Regional Office of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

- a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-20-180 B, 9 VAC 5-80-110 and Condition 14 of 7/9/2003 NSR permit)

**11. Facility or Control Equipment Malfunction - Hazardous Air Pollutant Processes** - The process listed below shall, upon request of the Department, shut down immediately if its emissions increase in any amount because of a bypass, malfunction, shutdown or failure of the process or its associated air pollution control equipment. The process shall not return to operation until it and the associated air pollution equipment are able to operate in the proper manner.

- a. The DeSmet dryer/cooler process.
- b. Vegetable oil extraction process.

(9 VAC 5-180 F.3., 9 VAC 5-80-110 and Condition 16 of 7/9/2003 NSR permit)

**12. Violation of Ambient Air Quality Standard** – The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9 VAC 5-20-180 I, 9 VAC 5-80-110, Condition 17 of 7/9/2003 NSR Permit and Condition 18 of 1/13/2004 NSR/PSD Permit)

**13. Maintenance/Operating Procedures** - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affects such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and not-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided, including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-50-20 E, 9 VAC 5-80-110, and Condition 18 of 7/9/2003 NSR permit)

**B. Monitoring**

1. **Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the CAM control devices controlling the CAM-affected units according to the following:

Emission Unit Ref. Nos.	Control Device	Stack Ref. No.	Performance Criteria	Indicator Range
GH-1	Fabric Filters	FF-62, FF-65, FF-66, FF-68, FF-69	Visible emissions	Yes or No
CFB-1	Fabric Filter	FF-S-30	Visible emissions	Yes or No
754	Dust Collector	S-22	Visible emissions	Yes or No
107A-E	Cyclone	S-9	Visible emissions	Yes or No
111	Cyclone	S-10	Visible emissions	Yes or No
136/47	Dust collector	S-11	Visible emissions	Yes or No
113A-F/520, 113H-M/521	Cyclone	S-8	Visible emissions	Yes or No
156	Cyclones	S-13/S-14	Visible emissions	Yes or No
163/532, 164/533	Dust collector	S16	Visible emissions	Yes or No

2. **Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.  
(9 VAC 5-80-110 E and 40 CFR 64.6 (c))
3. **Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.  
(9 VAC 5-80-110 E and 40 CFR 64.7 (b))
4. **Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the CAM-affected unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.  
(9 VAC 5-80-110 E and 40 CFR 64.7 (c))

5. **Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the CAM-affected unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.  
(9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))
6. **Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.  
(9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))
7. **Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Tidewater Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.  
(9 VAC 5-80-110 E and 40 CFR 64.7(e))
8. **Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the CAM-affected unit for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
  - a. Improved preventative maintenance practices;
  - b. Process operation changes;
  - c. Appropriate improvements to control methods;
  - d. Other steps appropriate to correct control performance; and
  - e. More frequent or improved monitoring.  
(9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

9. **Visual Emissions Monitoring** - For each emissions unit with a visible emissions limit contained in this permit, the permittee shall perform a weekly visual emissions observation during normal operations. If such visual observation indicates any visible emissions, the permittee shall take corrective action to eliminate the visible emissions. If such corrective action fails to eliminate the visible emissions, the permittee shall conduct a visible emissions evaluation (VEE) using 40 CFR 60, Appendix A, Method 9, for six minutes. If the six-minute VEE opacity average exceeds 50% of the standard for a specific unit, the VEE for that unit shall continue for an additional 12 minutes. If any of the six-minute averages during the 18 minutes exceeds the standard for a specific unit, the VEE for that unit shall continue for one hour from the initiation on the stack to determine compliance with the opacity limit. The permittee shall record the details of the visual emissions observations, VEEs, and any corrective actions. These records shall be kept at the facility and made available for inspection by the DEQ for the most recent five-year period.  
(9 VAC 5-80-110)

### C. Recordkeeping

1. **Recordkeeping for CAM** – The permittee shall keep records documenting the monitoring required by the CAM Plan, including:
- a. The date and time of observations, the name of the observer, and whether or not there were visible emissions;
  - b. Number of excursions in each semi-annual reporting period;
  - c. Corrective actions taken in response to excursions; and
  - d. If applicable, any written QIP required by Condition VII.B.8 and 40 CFR 64.8 and any activities undertaken to implement a QIP.
- These records shall be available for inspection by the DEQ and shall be current for the most recent five-year period.  
(9 VAC 5-80-110 and 40 CFR 64.9(b)(1) & (2))
2. **Visible Emissions Records** – The permittee shall keep records of all visible emissions observations, including the results of such observations, any corrective action taken and any Method 9 VEE's performed  
(9 VAC 5-80-110)

### D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-40-30 or 9 VAC 5-50-30 and 9 VAC 5-80-110)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.  
(9 VAC 5-80-110)



**E. Reporting**

1. **Reporting for CAM** – The permittee shall submit written CAM reports as part of the Title V semi-annual monitoring reports required by General Condition C.3 of this permit to the Director, Tidewater Regional Office. Such reports shall include at a minimum:
  - a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
  - b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
  - c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. (9 VAC 5-80-110 F and 40 CFR 64.9(a))

**XI. Insignificant Emission Units**

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutants Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
418	D. T. Discharge drag (top and tail)	5-80-720 B	PM, PM10	less than 5 tons/yr
419	Dryer/cooler feed drag	5-80-720 B	PM, PM10	less than 5 tons/yr
709	Expander exhaust fan (air break)	5-80-720 B	PM, PM10	less than 5 tons/yr
ST-1/ST-2	Hexane storage tanks	5-80-720 B.5.	VOC (hexane)	less than 5 tons/yr
1, 3, 4, 10-18	Soybean oil storage tanks	5-80-720 B.5.	VOC (hexane)	less than 5 tons/yr
SOL-1	Soybean oil loadout	5-80-720 B.5.	VOC (hexane)	less than 5 tons/yr
512	Extraction feed drag air break	5-80-720 B	PM, PM10	less than 5 tons/yr
998	Coal silo vent	5-80-720 B	PM, PM10	less than 5 tons/yr
997	Welding Shop	5-80-720 B	PM, PM10	less than 5 tons/yr
17	Elevator hull tank	5-80-720 B	PM, PM10	less than 5 tons/yr
18	Elevator hull tank	5-80-720 B	PM, PM10	less than 5 tons/yr
19	Elevator hull tank	5-80-720 B	PM, PM10	less than 5 tons/yr
20	Elevator hull tank	5-80-720 B	PM, PM10	less than 5 tons/yr
759	Pellet blower	5-80-720 B	PM, PM10	less than 5 tons/yr

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

## **XII. Permit Shield & Inapplicable Requirements**

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Storage Vessels	Subpart Kb has been amended to exempt those storage vessels previously subject only to recordkeeping requirements

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

## **XIII. General Conditions**

### **A. Federal Enforceability**

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

### **B. Permit Expiration**

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.  
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

### **C. Recordkeeping and Reporting**

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements.
  - b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement.(9 VAC 5-80-110 F)
2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.  
(9 VAC 5-80-110 F)
3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
  - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
    - (1) Exceedance of emissions limitations or operational restrictions;
    - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
    - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

#### **D. Annual Compliance Certification**

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.
7. One copy of the annual compliance certification shall be sent to EPA at the following address:  
Clean Air Act Title V Compliance Certification (3AP00)  
U.S. Environmental Protection Agency, Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

(9 VAC 5-80-110 K.5)

#### **E. Permit Deviation Reporting**

The permittee shall notify the Director, Tidewater Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition XII.C.3 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

**F. Failure/Malfunction Reporting**

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Tidewater Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Tidewater Regional Office.

(9 VAC 5-20-180 C and Condition 12 of 10/5/2009 NSR permit)

**G. Severability**

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

**H. Duty to Comply**

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

**I. Need to Halt or Reduce Activity not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

**J. Permit Modification**

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

**K. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-110 G.5)

**L. Duty to Submit Information**

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G. (9 VAC 5-80-110 K.1)

#### **M. Duty to Pay Permit Fees**

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350.

The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

#### **N. Fugitive Dust Emission Standards**

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

#### **O. Startup, Shutdown, and Malfunction**

At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

**P. Alternative Operating Scenarios**

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

**Q. Inspection and Entry Requirements**

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

**R. Reopening For Cause**

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

**S. Permit Availability**

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

#### **T. Transfer of Permits**

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.  
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)

#### **U. Malfunction as an Affirmative Defense**

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - b. The permitted facility was at the time being properly operated.
  - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
  - d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.  
(9 VAC 5-80-250)



**V. Permit Revocation or Termination for Cause**

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.  
(9 VAC 5-80-190 C and 9 VAC 5-80-260)

**W. Duty to Supplement or Correct Application**

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.  
(9 VAC 5-80-80 E)

**X. Stratospheric Ozone Protection**

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.  
(40 CFR Part 82, Subparts A-F)

**Y. Asbestos Requirements**

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).  
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

**Z. Accidental Release Prevention**

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.  
(40 CFR Part 68)

**AA. Changes to Permits for Emissions Trading**

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.  
(9 VAC 5-80-110 I)

**BB. Emissions Trading**

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.  
(9 VAC 5-80-110 I)

**XIV. State-Only Enforceable Requirements**

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

1. 9 VAC 5-50-140 Standards for Odorous Emissions.
2. 9 VAC 5-60-320 Standard for Toxic Pollutants  
(9 VAC 5-80-110 N and 9 VAC 5-80-300)